

Notice of Allowability

Application No.

09/679,434

Examiner

Lawrence Shrader

Applicant(s)

DAMRON ET AL.

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment of 12/03/2004.
2. ☒ The allowed claim(s) is/are 1, 2, 4 - 9, and 11 - 20.
3. ☒ The drawings filed on 03 October 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

1. Claims 1, 2, 4 – 9, and 11 – 20 are allowed.
2. Prior art Rasbold et al., U.S. Patent 5,202,975 taken either singly and/or in combination, does not teach or disclose a method as recited in claims 1 and 19 and the associated storage device and apparatus as respectively recited with the following features:

Identifying a threshold level in a queue corresponding to the maximum desirable fullness. If said queue is less full than threshold, choose a node in the ready set that corresponds to an instruction *that would increase the fullness of said queue*. If said queue is at least as full as the threshold, choose a node in the ready set corresponding to an instruction *that would decrease the fullness of the queue*. If no node is chosen, then heuristically choose a node in said ready set.

Identifying a target level of fullness within a queue configured to facilitate reordering of the set of instructions. If the queue is less full than said target level, *select a node in the ready set that corresponds to an instruction that would generate a memory operation*. If said ready set includes no such node, heuristically selecting a node in said ready set. If the queue is at least as full as said target level, *select a node in said ready set that corresponds to an instruction that requires completion of a previous memory operation*. If said ready set includes no such node, heuristically selecting a node in said ready set.

The code scheduling module is configured to add and remove nodes to and from the directed acyclic graph, and *to determine and correlate a maximum desirable number of elements*

Art Unit: 2124

identifier for said at least one queue, and choose one of said nodes in said ready set that will change the number of elements in said at least one queue in accordance with said correlated identifier.

3. Any comments considered necessary by the Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should be preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (571) 272-3734. The examiner can normally be reached on M-F 08:00-16:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2124

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence Shrader
Examiner
Art Unit 2124

9 February 2005



ANIL KHATRI
PRIMARY EXAMINER
